8. Movement

This chapter of the Plan talks about alternative ways of moving people, goods and information. The existing transportation system must be balanced to strengthen transit and other non-automobile forms of transportation, such as bicycles. Moving around as a pedestrian, transit rider or cyclist must be safe, convenient and comfortable; moving around in a car must remain safe, though not necessarily more convenient. While changes to the transportation system should not affect the accessibility of major centers, such as downtown Minneapolis or the University of Minnesota campus, we need to carefully consider the impact automobiles have on neighborhood and city livability.

8.1 Minneapolis will maintain and enhance the elements of a responsive transportation system through balancing the interests of economic development and neighborhood livability.

8.2 Minneapolis recognizes that most city streets continue to be places where people live and work, and secondarily function as methods of moving vehicles; reconciling inherent conflicts will require collaboration and compromise among stakeholders.

8.3 Minneapolis will continue to build, maintain and require a pedestrian system which recognizes the importance of a network of private and public sidewalks which achieve the highest standards of connectivity and amenity.

8.4 Minneapolis will continue to build and maintain road infrastructure in order to assure resident and motorist safety and mobility within the city.

8.5 Minneapolis will strengthen the transportation system in favor of transit alternatives in order to make transit a better choice for a range of transportation needs.

8.6 Minneapolis will follow a policy of "Transit First" in order to build a more balanced transportation system than the current one.

8.7 Minneapolis will direct its share of regional growth to areas well served by transit, to existing and potential growth centers and along transit corridors.

8.8 Minneapolis will continue to aggressively pursue transit improvements in corridors which serve major transit origins and destinations, with the eventual goal of a region wide rail system, including Light Rail Transit (LRT) and commuter rail.

8.9 Minneapolis will work with Metro Transit to improve the focus, priority and overall service offered by the existing transit system.

8.10 Minneapolis will promote the accessibility of downtown Minneapolis by improving and balancing the existing transportation system.

8.11 Minneapolis will continue to enhance the opportunities for cyclist movement.

8.12 Minneapolis will facilitate the development of communications infrastructure to support the continued growth of the city's economic base.

introduction

The ways in which information, people and goods are moved is constantly changing. The internet, fiber optic cable and the latest wave of telephone technologies will change our society in ways that are still uncertain. Meanwhile, railroads are in their best financial health in decades, airlines are recording record profits, bicycle use continues to increase and residents are demanding higher quality pedestrian environments. But, freeway use and congestion has increased, vehicular trips and trip distances have lengthened for the average household, mass transit usage has decreased and traffic calming is seen as a solution for the problems of vehicular volumes, speed and safety. This chapter will address both the assets and the transportation challenges Minneapolis faces in its next decades. The following pages describe the need for a balanced transportation system that responds to residents' desires to be able to move around efficiently and cost effectively while minimizing the social, economic and environmental costs transportation systems levy on urban life.

moving people, goods and information

Transportation systems --methods of moving people, goods and information-- make a good servant but a poor master. Moving around the city cost effectively and conveniently allows us to maintain social and economic relationships, but our ever-increasing use of the private automobile and airplanes impose differential social, economic and environmental costs on our citizens. New communication technologies are enhancing our ability to interact for both social and business purposes but visual pollution appears with new transmittal towers. Airplane noise, freeway noise, residential street traffic and truck traffic continue to be problems which threaten the livability of our neighborhoods. As downtown Minneapolis grows, more people travel from further distances and many come from communities with very low population and building density. As Minneapolis' population changes in the context of a growing regional economy, more of our own residents must travel beyond the city to find jobs. These challenges can be viewed through the eyes of the city dweller who must out commute, the suburbanite who commutes to downtown, the resident who must endure freeway or airport noise, or the resident whose mobility is impaired.

It is easy to identify problems. However, Minneapolis must recognize and build on its transportation assets if it is going to successfully meet its challenges and overcome its problems. For example, downtown is the region's most accessible location. Not only do half of the 140,000 downtown workers commute by some means other than a single occupant vehicle, but business-to-business and shopping trips that would be taken on any of the interstate roads in the suburbs are taken within downtown on sidewalks, through skyways or in the elevators of office towers. Employees can do business, run errands and shop within the downtown district without their automobiles and the attendant costs associated with their cars because of the concentration of activities and the existence of other transportation alternatives like the sidewalks, excellent transit service and the skyways. In fact, business trips in elevators use a 100% private transportation system which is energy efficient, environmentally friendly and has a remarkably low mortality rate--not a bad investment alternative to the publicly financed freeways.

building a balanced transportation system

Economic development requires the efficient movement of information, people and goods to maintain the city's local, regional

and national competitiveness. Neighborhood livability, on the other hand, requires the protection of residential environments from the more intrusive elements of the transportation system, such as noise, unsightly towers, heavy truck traffic, excessive traffic speeds, excessive traffic volumes and the parking demands of large institutions, commercial activities or seasonal recreational attractions. As the region has grown, our workplaces, shopping destinations and homes have located at increasingly greater distances from each other and many households travel greater distances over the course of their daily lives. Partly in response to this trend, households now own more cars on average than they did in 1970, and people travel alone for most of their trips (whether to work, shopping, home, or school) more frequently than they ever have before. The existing street system handles most of these demands very well given the stress and duress it has experienced as the number of trips we make has increased dramatically over the last three decades. The challenge we face in balancing our transportation system is reconciling the existing street system of local, collector and arterial roads with the surrounding land uses and building forms that neighbor these streets. It is in the city's best interest to preserve access to property and mobility on the city's streets. It is just as important to the long-term viability of the city's neighborhoods to protect and buffer the places people live from the adverse effects of high speed, high volume automobile traffic.

8.1 Minneapolis will maintain and enhance the elements of a responsive transportation system through balancing the interests of economic development and neighborhood livability.

Implementation Steps

Continue to reduce the negative impacts of traffic volumes on residential neighborhoods throughout the city.

Maintain the continuity of the dense grid of city streets to prevent substantial traffic increases on a small number of residential streets.

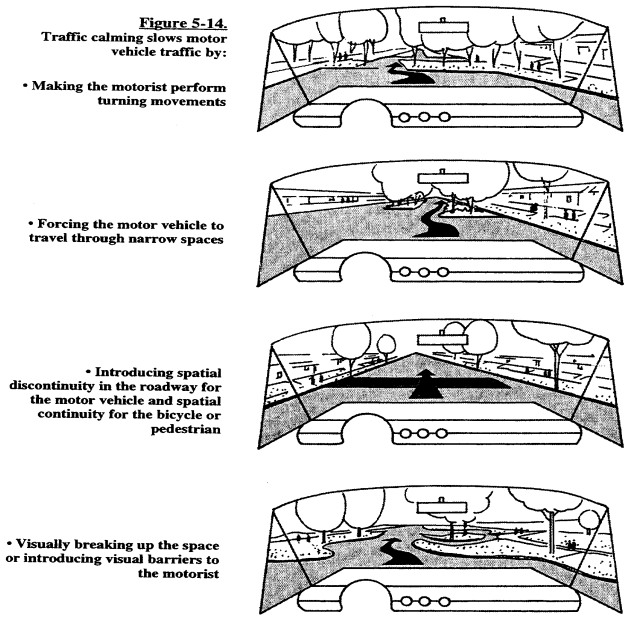
Continue to maintain roadways and bridges in the city's street system.

"The street is the river of life of the city,
the place where we come together."

When we think of transportation, we most typically think of city streets and the private automobile. With our streets comes vehicular traffic. The planning and management of street traffic must recognize the importance of livability issues to residents of Minneapolis neighborhoods. Automobile dominance will be challenged as Minneapolis continues to improve the quality of life within the city. Residents expect convenience and ease of travel in their daily trips, whether to work, shop or to visit friends. Reducing and slowing automobile traffic along a residential block encourages drivers to consider the activities and character of the area they are passing through, and can also reclaim the quiet, peaceful character of residential streets throughout city neighborhoods.

The character and function of city streets should be designated not only according to their transportation function (they transport cars across physical boundaries such as freeways or rivers) or their economic function (they provide access to growth centers or institutions like hospitals and universities) but also by their neighborhood or community function. Most streets designated to date have been defined in terms of their importance for general traffic movement, transit movement or truck movement. Given the tremendous importance of preserving the livability of all the city's neighborhoods and improving the superior quality of life Minneapolis is known for, it is important to convene a discussion about balancing the impacts of traffic on residential streets, regardless of their functional transportation classification.

Balancing the needs of vehicular traffic against residential concerns about noise, pollution, air quality and invasion of privacy is a delicate maneuver. (See Map 1.8.1 and 1.82)



Creating Bicycle Transportation Networks: A Guidebook
Source: University of Minnesota, Center for Transportation Studies

Making decisions about priorities will be guided by the need to protect and nurture livable neighborhood environments. Only freeways function primarily as a method of moving vehicles, but streets with primarily commercial uses benefit when they are accessible to shoppers arriving by automobile. Planning for the redesign of city streets should keep this distinction in mind. Accommodating new development while still protecting residential areas from the negative impacts of vehicular traffic continues to be an important component of future transportation planning. This philosophy will lead city departments to evaluate the role of one-way streets, the impact of truck traffic on residential neighborhoods, and methods of slowing automobile traffic to create safer streets for pedestrians, cyclists and residents. Traffic calming methods, including reclaiming underutilized pavement for wider boulevards, narrowing streets at intersections that have high pedestrian traffic, and establishing permanent parking lanes as needed to slow traffic on large avenues will be employed when needed and when acceptable to a given neighborhood.

8.2 Minneapolis recognizes that most city streets continue to be places where people live and work, and secondarily function as methods of moving vehicles; reconciling inherent conflicts will require collaboration and compromise among stakeholders.

Implementation Steps

Develop traffic calming methods which are appropriate to addressing the problems of speed and safety in automobile traffic.

Plan automobile traffic to minimize the negative impact of the automobile in city neighborhoods.

Explore the possibility of converting one-way to two-way streets on residential or commercial streets, as preferred.

New developments will be required to consider their relationship to the street through the site review process.

Require generous sidewalks that accommodate pedestrian volumes, ADA standards, trees and other amenities.

Insulate residential areas from commercial truck traffic.

Truck movement to the regional highway network will be facilitated in ways which minimize the presence of trucks on residential streets.

Protect historic resources from highway construction and expansion by working in conjunction with the Minnesota Department of Transportation (MnDOT).

Adopt parking regulations and approaches that are flexible enough to address short and long-term parking needs.

Continue to require off-street loading facilities for all new development in the downtown district and require underground loading, where appropriate.

basic road infrastructure

Our neighborhoods were built with a dense grid of streets which facilitates excellent access to homes and businesses while typically preventing individual residential streets from becoming overwhelmed with traffic. The city's residential street reconstruction program has given us a street network which is now in good repair. Our relatively compact development pattern throughout the city makes transit feasible, minimizes the amount of street surface per household (reducing both snow removal and street maintenance costs) and encourages early investment and service provision by private communication providers.

8.3 Minneapolis will continue to build and maintain road infrastructure in order to assure resident and motorist safety and mobility within the city.

Implementation Steps

Continue to coordinate roadway improvement projects with utility and flood control capital projects to minimize neighborhood disruption and costly roadway surface repairs due to poor project coordination.

Program, plan, design, survey, coordinate and provide construction assistance for city, Park Board, County and MnDOT road projects.

Program, plan, design, inspect, coordinate and provide construction management for all City bridge projects.

Provide repair and maintenance of city streets and alleys.

Continue to develop and maintain city-wide pavement management for all coordination and prioritization of street replacement and repair.

Inspect and repair sidewalks as needed to maintain a safe environment for pedestrians and to minimize liability claims against the city.

Construct, operate, and maintain all traffic control devices and facilities such as signs, signals, pavement markings, bus lanes, bike lanes, etc.

Prepare plans, specifications and estimates for signal and lighting modifications/improvements at intersections, special projects, spot locations and paving programs related to residential streets, municipal state aid, county state aid, trunk highways or MCDA projects.

Investigate fatal and severe traffic accidents and hit and run cases including accident reconstruction as needed and transmit information to the Departments of Planning and Public Works to inform their activities.

Glossary of Transportation Terms

Term Used	Definition
Functional Road Classification	A hierarchical classification of roadways. Classification involves determining what function each roadway should perform before determining street widths, speed limits and other design features as well as operational characteristics of a street. Principal Arterial: The metropolitan highway system is made up of the principal arterials in the region. Principal arterials include all interstate freeways. These roads only connect with other freeways, principal arterials and minor arterials and collectors. The emphasis is on mobility, not access. Minor Arterial: Minor arterial streets connect major generators within central business districts and regional business concentrations. The emphasis of minor arterials is on mobility as opposed to access in the urban area. The minor arterial should connect to principal arterials, other minor arterials and collectors. Connection to some local streets is acceptable. Minor arterials should service medium to short trips. Collector: The collector system provides connections between neighborhoods, and from neighborhoods to minor business concentrations. Mobility and land access are equally important. Direct land access should be predominantly to development connections. Typically, collectors serve short trips of one to four miles. Local Streets: Local streets connect blocks and land parcels. The primary emphasis is on land access. In most cases, local streets will connect to other local streets and collectors; occasionally, they will connect to minor arterials. Local streets serve short trips at low speeds.
Traffic Calming	An integrated traffic planning approach that seeks to maximize mobility while reducing the undesirable effects of that mobility. Different traffic calming methods may address concerns about traffic speed, safety, volume and noise.
Infrastructure	Basic systems designed to supply the city with water, sanitation, and streets to facilitate business and residential development.

source: Metropolitan Council

creating an attractive pedestrian environment

Auto-oriented urban places have pushed out pedestrians and created polluted, unpleasant environments. Auto emissions of carbon monoxide, sulfur dioxide and nitrogen oxide account for 50% of the air pollution we experience, and gains in fuel efficiency and emissions control have been offset by increases in the number of cars and a doubling of distances traveled by the average citizen between 1970 and 1990. Taking the car for short trips is also a strain on the environment. Cold automobile starts are one of the most severe pollutant activities a car will produce; three block trips to local stores and services are a waste of energy resources and contaminate the environment. Careful attention to the pedestrian environment can contribute significantly to our willingness to leave our cars at home and walk or cycle to certain destinations. By capitalizing on and improving pedestrian environments with a special emphasis on high volume pedestrian areas such as downtown Minneapolis, Uptown (Lake and Hennepin) and the University of Minnesota Area, developments in these areas and other locations in the city can significantly enhance existing pedestrian environments.

8.4 Minneapolis will continue to build, maintain and require a pedestrian system which recognizes the importance of a network of private and public sidewalks which achieve the highest standards of connectivity and amenity.

Implementation Steps

Require the most generous sidewalk width possible for public sidewalks located in high pedestrian volume areas, such as existing growth centers, neighborhood commercial areas, transit corridors and mixed use areas.

Ensure that all sidewalk standards meet ADA requirements as mandated by law.

Promote the development of design standards that produce high quality sidewalks for public and private sector development, with supporting street furniture (including street trees), ample widths for pedestrian traffic and transit loading, and the use of materials that require acceptable levels of maintenance.

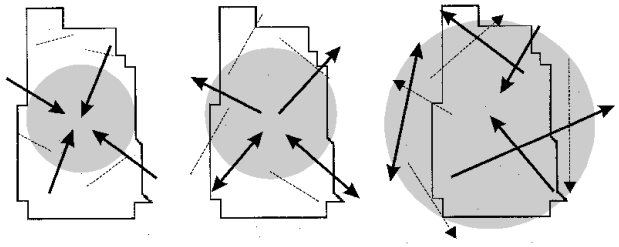
Encourage all new developments to situate their front doors so that they open onto the public sidewalk.

the need for alternative transportation choices

Most of the people who call Minneapolis their home today are traveling longer distances and making more trips than their predecessors did 20 years ago. Estimates suggest that the total number of vehicle miles traveled in the area has increased 129% from 1970 to 1990. Vehicle occupancy has declined (1.5 persons per vehicle in 1979 compared to 1.29 in 1990), as has transit ridership (93 million in 1978 to 61 million region wide in 1995). The end result has been more people driving alone to work on the area's roads, leading to greater congestion and traveling time for commuters.

Since the 1950's, over 525 miles of freeways and expressways have been built in the metropolitan area, funded, for the most part, by fuel taxes and state expenditures, with some contributions from city taxpayers who may drive principally on local streets. Most of the region's growth and new development, in terms of new jobs, single family housing and industrial/commercial building, has been concentrated in the second and third ring suburbs. Seventy-five percent of the downtown work force now commutes from outside the city.

"As the city grew and some of the more affluent residents moved to the outskirts and beyond the city's boundaries, the commuting patterns (shown in solid arrows) changed from a neighborhood-to-downtown or neighborhood-to-neighborhood focus to a suburb-to-downtown or suburb-to-suburb focus. Shorter trips within the neighborhood to get groceries, to entertain or to visit recreational sites changed over time as residents covered greater distances more frequently."



National data tell us that almost all our travel in urban areas (about 98%) is done by car. In the Twin Cities metropolitan area, automobile ownership per household has increased from 1.25 vehicles in 1970 to 1.70 in 1990. Data also show us that more people travel alone to their destinations, whether they are headed home, to work, to school, or shopping. The average trip made by car in 1958 carried 1.57 persons and in 1970 carried 1.50 persons. By 1990, occupancy in the average trip taken in the metropolitan area had declined to 1.29 persons per vehicle. Automobile travel spurs new investment in developments located along new highways in the outer reaches of the urban area. As a community, we need to carefully evaluate the role the single occupant, privately owned automobile should have in our city. Balancing automobile travel against the provision of good transit alternatives will result in better opportunities to offer excellent transportation choices to residents and workers.

The allocation of resources to connect second and third ring suburbs and other urbanizing areas with new freeways, or the construction of massive parking ramps to accommodate the tens of thousands of workers who travel to and from the downtown area daily, must be tempered with a comprehensive look at transit needs and development throughout the entire region. The reality facing Minneapolis in the form of increased congestion and wasted time for many residents, as well as environmental, economic and social issues emphasized in the trends noted above, demands a more balanced network of transportation systems for the city. Just as our dependence on the private automobile has developed over generations, a shift to a more balanced transportation system will also take time and will occur only through many consistent changes.

8.5 Minneapolis will strengthen the transportation system in favor of transit alternatives in order to make transit a better choice for a range of transportation needs.

Implementation Steps

Designate and improve transit service in a high transit service area located in central Minneapolis.

Maintain good automobile access to growth centers such as Downtown, the University of Minnesota Twin Cities campus and the Honeywell/Hospitals area in South Minneapolis.

Work with the Metropolitan Council to develop projects (for consideration for funding from the Metropolitan Livable Communities demonstration account) which demonstrate how transit can be interrelated with housing and commercial redevelopment opportunities.

Make it safer but not necessarily more convenient to move around the city in automobiles.

Do not invest in new highway construction without investigating true life cycle costs, including environmental and social costs.

transit first!

Influencing patterns and trends in how people choose to move around the city relies on a combination of efforts. Programs which have provided preferential treatment for the automobile must be revised to encourage preferential treatment for transit riders and car pool users. The overriding objective of programs such as these must be the improvement and expansion of the reach, quality and reliability of transit service.

Offering discounts for transit use to the commuter population, incentives to share commuting trips by car or van pooling, and providing facilities within the workplace to accommodate different modes of transportation (e.g. bicycle lockers and shower/change rooms for employees) are some of the methods that have proven to be effective in Minneapolis and other communities. As a collaboration between private sector employers and government, employers will be encouraged to use these methods and approaches to provide incentives for their employees to actively use alternative transportation methods.

Providing more incentives for people to use alternative methods of transportation is merely the first step to be taken. Just as importantly, decisions about land use and future development patterns must take transit into consideration. The city's resources, in terms of land, air quality and environmental integrity, are too 0unbalanced fashion. Planning for transit as a more effective means of moving more people with lesser infrastructure and environmental costs must come first so that it is both convenient, safe and comfortable for transit riders to move around the city.

8.6 Minneapolis will follow a policy of "Transit First" in order to build a more balanced transportation system than the current one.

Implementation Steps

Build partnerships with state and metropolitan agencies and other local government units to advance transit strategies and programs of mutual benefit.

Focus transit services and development growth along transit corridors.

Give public transit priority in development planning and on the Minneapolis street system.

Secure a reliable and growing funding source to effectively support public transit.

transit service and new development

Minneapolis' existing growth centers in downtown, at the University of Minnesota area and at the Honeywell/Hospitals area in South Minneapolis must continue to have high quality transit service. These transportation links are essential to preserve the accessibility and, therefore, the competitiveness of unique destinations like the growth centers.

Transit corridors are another important tool used to encourage development in the city and provide high quality transit service throughout the City, and the region. Corridors that serve longer distance travel are usually located on exclusive rights of way or other travel advantages that allow transit to travel independently of other vehicles and usually at higher speeds. Examples of this service include light rail transit (LRT), commuter rail and high speed bus service. Local transit corridors are characterized by frequent service on major roadways, like Community or Commercial Corridors, where special transit infrastructure such as high quality bus shelters or bus pullouts are built. Ideally, these two types of corridors are linked to provide better service.

The development of transit corridors can result in better transit service and a more efficient transit system. Corridors can be the "backbone" of a simplified transit system that links neighborhood routes.

Most existing high-speed transit corridors do not serve Minneapolis neighborhoods. Current express corridors serve primarily suburban destinations and travel along the freeways, on I-94 north, I-394, I-35W south, I-94 east and I-35W northeast. This concept needs to be addressed at the city level to provide better inter-neighborhood service. The existing University of Minnesota Transitway serves the Minneapolis and St. Paul campus, but has very limited service to areas along the route, which could be expanded in future transit corridor development. The Hiawatha Transitway is proposed as an LRT corridor, serving Downtown, the University of Minnesota, the Minneapolis/St.-Paul International Airport and the Mall of America. The City's *Transit Planning and Funding Strategy Report (1996*), as well as the Metropolitan Council's *Transit 2020 Master Plan (2000)*, identifies potential transit corridors that would serve Minneapolis.

City- Identified Transit Corridors
Hiawatha Avenue
Olson Memorial Highway
University of Minnesota
source: the City of Minneapolis' Transit Planning and Funding Strategy Report, July 1996

Transit 2020 Master Plan Corridors
LRT Corridors
Hiawatha Avenue
Central Corridor (connecting Minneapolis and St Paul)
Commuter Rail Corridors
Northstar (connecting St Cloud and Minneapolis)
Red Rock (connecting Hastings, St Paul and Mpls)
Dan Patch (connecting Dakota County with Mpls)
Busway Corridors
Southwest/ Midtown (Connecting northwest suburbs with Mpls)
Northwest (connecting northwest suburbs with Mpls)
Northeast (connecting northeast suburbs with Mpls)
Source: Metropolitan Council Transit 2020 Master Plan, February 2000

The mix of land uses and activities, the magnitude of development and even site design heavily influence transit usage at a given site. The concept of mixed use in the city's growth centers will flourish if two things coincide; first, that the pedestrian environment is

designed and built as an interesting place to be and, secondly, that there is a reason for people to see the place, even if it may be on the way to another destination.

The presence of pedestrians is essential to the success of these growth centers, as has been seen in two of the existing centers in downtown and the University of Minnesota area. More transit riders result in more pedestrians at either trip end. A successful pedestrian-oriented environment within a dense, mixed use core area is only possible when many residents, workers and visitors arrive without their cars because it is more convenient to arrive by transit. The result is an untapped resource of pedestrians willing to spend time relaxing, shopping, eating or strolling within a core area of mixed use development. Locating commercial amenities and job generating activities adjacent to transit corridors makes for good people environments. Employees have excellent transit options and can serve as a consumer market for complementary retail commercial activities that establish themselves in these areas.

The co-location of complementary activities and the importance of linking new growth areas to transit service cannot be over emphasized. Growth will be welcomed, but managing the form and impact new investment has on the urban environment is an important priority for the city. The impact the private automobile has on the city is powerful. It affects our sense of livability in our homes and it influences how we know our neighbors when they are separated from us by a busy street instead of one which encourages neighborly interaction. Accommodating the automobile consumes vast amounts of land and resources to maintain the streets in the conditions we have come to expect. Planning for future growth by directing new investment to areas already served by existing transportation networks can achieve significant results in both regional and urban growth patterns over the next two decades.

8.7 Minneapolis will direct its share of regional growth to areas well served by transit, to existing and potential growth centers and along transit corridors.

Implementation Steps

Require that future growth centers be well served by reliable and convenient transit service.

Require that all major new developments located within the city facilitate transit access and service.

Develop components of site plan review and environmental review manuals which can be used in land use and environmental processes to secure more transit friendly developments.

Allow costs of driving in peak rush hour traffic to reflect the true costs of congestion and sprawl.

Prohibit construction of new freeways in Minneapolis.

Allow limited expansion and improved capacity of existing freeways in order to reduce traffic spillover onto primarily residential arterial roads when mitigation of impacts is determined to be acceptable to the city.

Encourage employers to provide incentives for ride-sharing, car or van pooling and bicycling and other alternatives of getting to work.

light rail transit (LRT)

Light Rail Transit is considered a high priority investment for express transit corridors in both regional and city transit plans. Light Rail Transit (LRT) is a quiet, environmentally friendly and human-scaled transit service that supports the City's growth targets and expands the transportation choices for large numbers of Minneapolis households. LRT service consists of a fleet of electrically powered vehicles, simple stations of 200'-300' platforms with weather protection, enclosure and heat, ticket purchase and information kiosks and signage, security and safety systems. Power to the vehicles is delivered through overhead electric wires, and the cars are accessible to all from a 14-inch high platform at each station location. These stations are generally sited anywhere from 1-2 miles apart in Minneapolis, and are thus very accessible to Minneapolis residents. Service is frequent, running all day at a range of 7 ½ to 10 minutes in peak hours and normal daytime hours, to every ½ hour in the latest hours of the evening and the earliest hours of the morning.

The LRT's steel rails are either embedded in the street or designed with tie, ballast and rails distinct from the roadway, much like a traditional rail line. The Hiawatha Corridor will connect downtown Minneapolis through 14 neighborhoods to the Minneapolis-St. Paul International Airport and on to the Mall of America and potentially to northern Dakota County (See adjacent box describing the Hiawatha service).

The state legislature, in 1998, approved a commitment of $40 million towards the Hiawatha Light Rail project, with another $60 million approved in 1999, and the light rail proposal has been allocated $120 million in the new federal transportation bill signed into law in early 1998 (the Transportation Equity Act for the 21st century, known as TEA-21). The project's final funding, design and planning is still being shaped by partner agencies at the city, regional, state and federal levels. Construction is expected to begin in 2001. Opening day in 2003 will welcome a new generation of rail transit service to the region and its anticipated successes will form the basis of a regional system of LRT lines serving activity centers throughout the Twin Cities region.

commuter rail

Commuter rail is a type of transit service that operates on existing freight rail tracks and is powered by diesel locomotives. Service typically operates over long distances with stations spaced about 5 to 7 miles apart. Service is targeted toward people who are travelling long distances into regional business centers for the workday.

The Northstar Corridor is an 80-mile transportation corridor from the St. Cloud area to downtown Minneapolis that includes Trunk Highway 10/47 and the Burlington Northern Santa Fe Railroad. This is the fastest growing corridor in the state and has been identified by the Minnesota Department of Transportation (MnDoT) as having the highest potential for successful commuter rail service. Northstar Corridor commuter Rail is proposed to have intermodal connections to bus service within the corridor, and the future Hiawatha LRT service via a connection to downtown Minneapolis.

It is likely that the Northstar will be the first commuter line in the region. It will include 12 stations, including one in Northeast Minneapolis and the terminal station in Downtown Minneapolis. The Northstar Corridor Development Authority (MCDA) is a Joint Powers Board consisting of counties, regional railroad authorities, cities and townships along the corridor, including Minneapolis. The NCDA has secure federal and state authorization to study, design and implement the commuter rail system and other transportation improvements in the corridor as soon as 2003.

8.8 Minneapolis will continue to aggressively pursue transit improvements in corridors which serve major transit origins and destinations, with the eventual goal of a region wide rail system, including Light Rail Transit (LRT) and commuter rail.

Implementation Steps

Develop a dedicated transitway along Hiawatha Avenue and in other corridors where LRT will run.

Conduct master planning for station areas along the Hiawatha Corridor that addresses issues of land use, future development opportunities, circulation patterns and public infrastructure investments.

Invest in high quality amenities and infrastructure to support LRT service along Hiawatha Avenue and in other corridors where LRT will run.

Support the development of commuter rail, including the Northstar, Red Rock and Dan Patch corridors.

Conduct master planning for any future stations located along light rail or commuter rail corridors, including terminal stations in Downtown Minneapolis.

Continue to pursue a regional network of improved transit, linking LRT service and existing bus service.

Hiawatha Light Rail Transit: Building Livable Communities

The presence of rapid, reliable and comfortable transit service linking Downtown, neighborhoods of south Minneapolis, the airport and the Mall of America will be a remarkable addition to the city. Of importance to the city is the impact light rail transit service will have on quality of life, in terms of improved transportation choices, new development patterns, preservation of neighborhood character and enhanced pedestrian connections around station sites.

Hiawatha LRT Corridor Goals

- enhance neighborhood quality of life
- strengthen neighborhoods
- redevelop land along the Hiawatha Corridor
- improve transportation with higher transit ridership and better service
- preserve downtown Minneapolis' economic vitality by improving transit service.

Fitting light rail transit into neighborhoods can support the initiative of enhancing the city's livable neighborhoods. As the city grows with the region, new housing and new job generators will be encouraged to take advantage of transit.

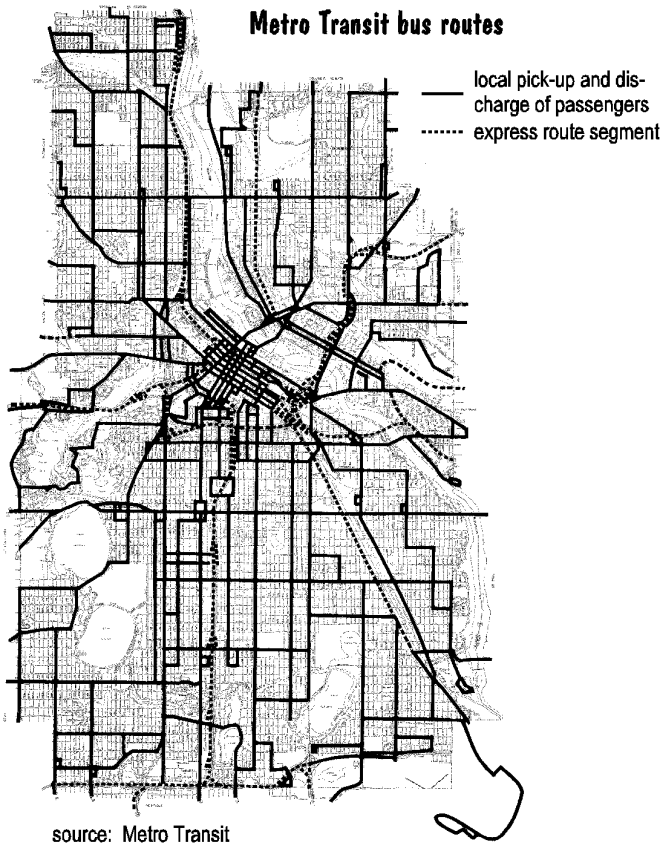
A number of locations along the Hiawatha Corridor are identified in this Plan as potential sites for growth-fueled development. Yet maintaining the beauty, livability and human-scale of the neighborhoods that surround the corridor is critical to the long-term future of the City. This is a goal for the City, as outlined in a City Council action of December 1998. The city's goals for the corridor were clearly identified in that action, and will continue to guide planning and development for the light rail project into the future.

Hiawatha LRT Corridor- Vision Statement

"The Hiawatha Corridor will provide high quality transit connections to major destinations in the City of Minneapolis. It will promote reinvestment in the shape of new housing development and the creation of new employment opportunities at specific opportunities along its length. The LRT corridor will attract a portion of the city's growth while maintaining the livability and preservation of adjacent neighborhoods by devoting careful attention to land use planning and development, station area design and community involvement and participation in these activities."

Metro Transit Bus Service

Until the downtown area of Minneapolis and Saint Paul can be linked by LRT, commuter rail and/or full service busways, and until suburban commuters have a rapid transit option, suburban and High Occupancy Vehicle (HOV) lanes will continue to ferry workers to and from their homes and workplaces. Increasing transit ridership depends on quality, convenience and cost of bus travel. Metro Transit must deliver reliable, easily accessible and convenient service to its riders to maintain and increase the proportion of riders choosing transit as their primary method of getting to and from work. To increase ridership and the public's perception of transit operations, Metro Transit must devote considerable resources to winning over transit riders by improving reliability, offering greater convenience and safer, more secure environments on the buses themselves. Shelters and lighting must be provided in such a way that riders are comfortable and safe while waiting for their rides.



source: Metro Transit

Improving the quality of transit service between city neighborhoods makes a considerable difference on how many residents evaluate their "quality of life". Transit is a key component of the public realm and often the route into and out of a neighborhood leaves an impression of the neighborhood. Plantings, clean up, lighting, and security all contribute to the experience of such a place, as seen from the window of a bus passing through the neighborhood.

8.9 Minneapolis will work with Metro Transit to improve the focus, priority and overall service offered by the existing transit system.

Implementation Steps

Establish high quality, convenient neighborhood-to-neighborhood, as well as city-to-suburb, transit service.

Increase passenger comfort by installing all-weather bus stations at major activity nodes and provide safer, more convenient service to all passengers.

Improve the responsiveness of the bus system to meet the distinct needs of Minneapolis residents.

Develop route changes and different types of buses that are suited to Minneapolis within the Metro Transit system.

Experiment with mini buses and shuttles as a way to improve transit.

Advocate for the continuation and development of express service on I-35W from South Minneapolis, I-94 from North Minneapolis, and on new busways that may be developed in the future.

Downtown movement

One of the most pressing priorities for future economic growth in the central city requires that the city maintain the accessibility and mobility of its downtown area for the large number of workers, residents and visitors who make downtown a daily destination. *Minneapolis Downtown 2010*, the city's policy document for the downtown area approved by City Council in October of 1996, describes some of the important approaches that will be adopted in order to preserve accessibility and convenience within the transportation system. The Minneapolis Plan re-emphasizes the directions established by the Downtown 2010 plan in recommending future transportation planning for the downtown area.

8.10 Minneapolis will promote the accessibility of downtown Minneapolis by improving and balancing the existing transportation system

Implementation Steps

Improve transit service in the downtown area by relieving bus congestion during the afternoon peak period, promoting the reduced fare downtown transit zone, and improving the quality of downtown transit stops.

Design and manage the city's arterial street system to balance city and regional traffic needs with the regional highway system serving primarily regional traffic needs.

Manage the highway ramp metering system to eliminate penalties to downtown travelers in the form of excessive queues and delays and enhance the appeal of carpooling.

Design and manage the downtown street system to balance the demands of commuters with the demands of transit riders, pedestrians, cyclists, shoppers and visitors.

Ensure an adequate supply of long-term parking to meet projected employment growth, balanced with objectives for increasing transit use.

Locate long-term parking facilities and principal use parking lots on the periphery of the office, retail and entertainment districts but outside of residential areas, in order to preserve land for more intensive use, improve air quality and provide a pedestrian, bicycle and transit-oriented environment in these areas.

Ensure a sufficient supply of short-term parking in the retail core by expanding the public role in providing and managing short-term supply.

Encourage alternative modes of transportation by allowing reductions in long-term parking requirements in exchange for measurable and quantifiable incentives for transit usage and ride sharing.

Give preferential access and rates to carpoolers in parking facilities in downtown and in municipally owned parking facilities.

Reduce peak hour demand on transportation systems by providing incentives to use public transportation, to share rides and to change work hours.

Decrease truck traffic on downtown streets during peak hours and continue to require off-street loading facilities with all new development.

Provide bicycle parking facilities in parking garages and major transit stations.

Improve and promote taxi service as a means of moving about downtown.

Coordinate and manage the performance, construction, operation and management of the Municipal Parking System.

promoting alternative forms of transportation

Directing community wide efforts at improving automobile alternatives will involve more than investments in existing and planned transit systems. Non-motorized travel, by bicycle or on foot, will also be comprehensively planned, existing routes will be improved, and new connections for commuters and pedestrians will be established. Making Minneapolis a more walkable environment, through careful attention to design and building forms, will make walking a more attractive choice for many daily trips people make. Investments in bicycle infrastructure will increase the appeal of traveling by bicycle for both commuter and recreational cyclists. Clearly not all trips currently made in automobiles will convert directly into trips on foot or by bicycle, but changes to the environment will assist in making both options much more appealing.

cycling in the city

Other alternatives to mass transit, particularly cycling, will continue to be improved in the future. Commuter cyclist travel to downtown doubled between 1977 and 1987 and increased by close to the same amount from 1987 to 1990. Downtown Minneapolis has a continuing need for safe and secure enclosed bicycle parking spaces (bike lockers) despite the fact that the city has provided over 200 lockers in its parking ramp system. Another part of the city's effort has been to design a cost sharing program to encourage business owners to provide lockers, racks and other amenities for employees who choose to bicycle to work. Another focus to bicycle planning is being pursued through the proposed commuter bicycle trails, of which the Cedar Lake Trail is the city's first example. Separation of cyclist and automobile is sought, whenever possible, for reasons of safety and efficiency. Designated bike lanes on-street, combined with traffic speed reduction efforts, make a cyclist's trip much more pleasant and far less impacted by auto traffic.

The overwhelming number of people who travel to a shopping destination by car discourages pedestrian scale design, landscaping and facade treatment, contributing to the pattern of strip mall development seen throughout the city. Alternatives to driving must be supported and improved to reach environmental and sustainability goals, and to improve the quality of everyday life. Good design and careful attention to the cycling environment can contribute significantly to our willingness to leave our cars at home and cycle to certain destinations.

8.11 Minneapolis will continue to enhance the opportunities for cyclist movement.

Implementation Steps

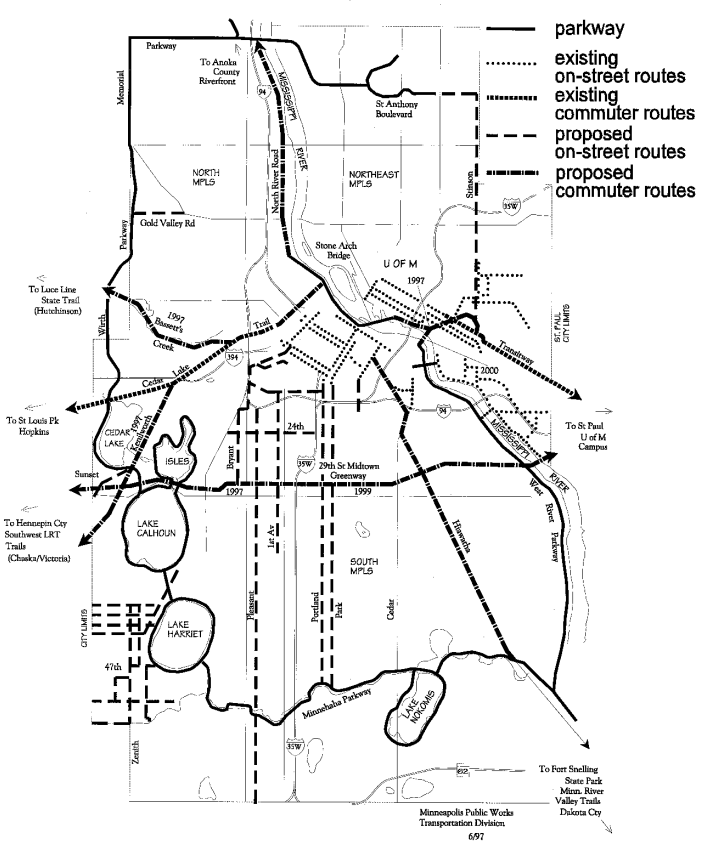
Make it safer, easier and more convenient to cycle in the city by expanding and maintaining lanes, paths, trails, and parking facilities for cyclists.

Design and improve streets to be pleasant for bicyclists by using best available design widths for slow vehicle speeds, wide sidewalks, and a great variety of trees.

Continue to plan for and develop a coordinated system of commuter and recreational bikeways that utilize collectors, local streets, and greenways.

Integrate bike amenity requirements, such as bike lockers and showers for cyclist employees, into the zoning code.

Minneapolis bike routes, 5 year plan



source: Minneapolis Public Works, Transportation Dept., 6/97

the movement of goods and information

Most economic activity in today's business climate relies in some way or another on information. With the birth and rapid growth of the internet, businesses are just as likely to exchange information about financing, innovations in technology, or new product development with their counterparts a continent away as they are to share it with a neighboring business on the other side of the city. Other businesses that trade directly in the "information economy" rely on a physical and organizational connection to these networks as their principal lifeline. For example, the finance, insurance and real estate sectors (F.I.R.E) work principally with electronically transmitted information and they have an overwhelming need to be "wired" into electronic networks, as well as the informal information exchanges that happen in person, on the phone and in a chance business encounter. This gives much credence to the idea of economic clusters, defined as a critical mass of skill, information, relationships and infrastructure in a given field.

In Minneapolis, we see these clusters of complementary and related businesses choosing their location based in some part on the close proximity of business partners, customers and suppliers. Downtown Minneapolis and the University of Minnesota area are examples of this kind of "place-focus". As our economy becomes more involved with customers, market trends, suppliers and producers scattered around the globe, most competitive businesses seek out a connection to worldwide information networks. Electronic information is the baseline tool these businesses need to maintain contact and informational links with activities around the globe.

8.12 Minneapolis will facilitate the development of communications and transportation infrastructure to support the continued growth of the city's economic base.

Implementation Steps

Develop new means for city government to communicate with citizens, including developing the city's internet presence and expanding voice response techniques.

Coordinate the installation of fiber optics in downtown Minneapolis as well as in other designated growth centers in the city.

Encourage the sharing of communications infrastructure (fiber optic, cellular phone antennae locations) among multiple users.

Facilitate planning and installation of electronic infrastructure to public facilities such as schools and libraries that act as neighborhood centers.

Maintain rail corridors as an alternative system of moving goods, separate from the interstate and truck routing system.

putting it together

Moving information, people and goods is critical to the city's goal for its economy and long-term sustainability. The condition of our streets and technological infrastructure directly influences our success in regional, national and international marketplaces. These well-traveled physical and information paths connect sellers to buyers, clients to service providers, and individuals with the information and destinations they require to maintain the social and economic relationships that are important to their daily lives. Whether the setting is within the residential streets of a neighborhood, across these boundaries to link opposite ends of the city together, or connecting Minneapolis with its larger regional markets and networks, moving people, goods and information is essential to the well-being and the overall economic livability of the community we live in. The transportation system is one of several important elements that contributes to the economic vitality of the city. Yet, the environmental costs of the transportation systems we use to accomplish these tasks must be borne in mind so that decisions made about investments are guided by an understanding that transportation infrastructure is but a tool and should be considered as a means to an end. Our goal is to provide accessibility and mobility in the most cost effective manner to the most people, with the least environmental impact possible. Creative solutions designed to meet these criteria are being pioneered daily in Minneapolis and in cities throughout the world. Minneapolis expects to both continue as an innovator and to learn quickly and effectively with respect to transportation challenges and solutions.